

7

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance

2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction:

Permit #:

Job Information

Builder: Trent Giebeig

Community:

Lot: NA

Address: 16430 N. US Hwy 441

City: Lake City

State: FL

Zip: 32055

Air Leakage Test Results *Passing results must meet either the Performance, Prescriptive, or ERI Method*

☐ **PRESCRIPTIVE METHOD**-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2.

☒ **PERFORMANCE or ERI METHOD**-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405-2023 (Performance) or R406-2023 (ERI), section labeled as infiltration, sub-section ACH50. ACH(50) specified on Form R405-2023-Energy Calc (Performance) or R406-2023 (ERI): 7.000

$\frac{\text{CFM}(50)}{\text{Building Volume}} \times 60 \div \frac{19026}{\text{ACH}(50)} =$

☐ **PASS**

☐ When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.

Method for calculating building volume:

☐ Retrieved from architectural plans

☒ Code software calculated

☐ Field measured and calculated

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and Section M1507.3 if the *Florida Building Code, Residential*. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), *Florida Statutes*, or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, back draft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.
7. If an attic is both sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting the infiltration volume and calculating the air leakage of the home.

Testing Company

Company Name: _____

Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2023 8th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____

Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____

Issuing Authority: _____

Duct Leakage Test Report

Residential Prescriptive, Performance or ERI Method Compliance

2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction:	Permit #:										
Job Information											
Builder: Trent Giebeig Community: Lot: NA											
Address: 16430 N. US Hwy 441											
City: Lake City State: FL Zip: 32055											
Duct Leakage Test Results											
<table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="padding: 2px 5px;">System 1</td><td style="padding: 2px 5px;">_____ cfm25</td></tr><tr><td style="padding: 2px 5px;">System 2</td><td style="padding: 2px 5px;">_____ cfm25</td></tr><tr><td style="padding: 2px 5px;">System 3</td><td style="padding: 2px 5px;">_____ cfm25</td></tr><tr><td style="padding: 2px 5px;">Sum of others</td><td style="padding: 2px 5px;">_____ cfm25</td></tr><tr><td style="padding: 2px 5px;">Total of all</td><td style="padding: 2px 5px;">_____ cfm25</td></tr></table> <div style="display: flex; align-items: center; gap: 10px;"><div style="text-align: right;">_____ ÷ 2114 = _____ Qn</div><div style="text-align: left; font-size: small;">Total of all systems Total Conditioned Square Footage</div></div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"><div style="text-align: center;"><input type="checkbox"/> PASS</div><div style="text-align: center;"><input type="checkbox"/> FAIL</div></div>	System 1	_____ cfm25	System 2	_____ cfm25	System 3	_____ cfm25	Sum of others	_____ cfm25	Total of all	_____ cfm25	<div style="margin-bottom: 10px;"><input type="radio"/> Prescriptive Method cfm25 (Total) To qualify as "substantially leak free" Qn Total must be less than or equal to 0.04 if air handler unit is installed. If air handler unit is not installed, Qn Total must be less than or equal to 0.03. This testing method meets the requirements in accordance with Section R403.3.3. <i>Is the air handler unit installed during testing?</i> <input type="checkbox"/> YES (= 0.04) <input type="checkbox"/> NO (= 0.03)</div> <div><input checked="" type="radio"/> Performance/ERI Method cfm25 (Out or Total) To qualify using this method, Qn must not be greater than the proposed duct leakage Qn specified on Form R405-2023 or R406-2023. <div style="display: flex; justify-content: space-between; font-size: small;"><div>Leakage Type selected on Form R405-2023 (EnergyCalc) or R406-2023</div><div>Qn specified on Form R405-2023 (EnergyCalc) or R406-2023</div></div><div style="display: flex; justify-content: space-around; margin-top: 10px;"><div style="border: 1px solid black; padding: 5px; width: 40%;">Proposed Qn</div><div style="border: 1px solid black; padding: 5px; width: 40%;">0.040</div></div></div>
System 1	_____ cfm25										
System 2	_____ cfm25										
System 3	_____ cfm25										
Sum of others	_____ cfm25										
Total of all	_____ cfm25										
<small>Duct tightness shall be verified by testing in accordance with ANSI/RESNET/ICC380 by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i), Florida Statutes.</small>											
Testing Company											
<div>Company Name: _____ Phone: _____</div> <div>I hereby verify that the above duct leakage testing results are in accordance with the Florida Building Code requirements with the selected compliance path as stated above, either the Prescriptive Method or Performance Method.</div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>Signature of Tester: _____</div><div>Date of Test: _____</div></div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>Printed Name of Tester: _____</div><div></div></div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>License/Certification #: _____</div><div>Issuing Authority: _____</div></div>											

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance

2023 Florida Building Code, Energy Conservation, 8th Edition

Jurisdiction:		Permit #:	
Job Information			
Builder:		Community:	Lot:
Address:		Unit:	
City:		State:	Zip:
Air Leakage Test Results <i>Passing results must meet either the Performance, Prescriptive, or ERI Method</i>			
PRESCRIPTIVE METHOD- The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2			
PERFORMANCE or ERI METHOD- The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on FORM R405-2023 (Performance) or R406-2023 (ERI), section labeled as Infiltration, sub-section ACH. <i>ACH(50) specified on Form R405-2023-Energy Calc (Performance) or R406-2023 (ERI):</i> _____			
$\frac{\text{CFM}(50)}{\text{Building Volume}} \times 60 = \text{ACH}(50)$		<u>Method for calculating building volume</u>	
<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="radio"/> Retrieved from architectural plans	
		<input type="radio"/> Code software calculated	
		<input type="radio"/> Field measured and calculated	
When ACH(50) is less than 3, Mechanical Ventilation Installation must be verified by building department.			
R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and Section M1507.3 of the <i>Florida Building Code, Residential</i> . Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 pascals). Testing shall be conducted by either individual as defined in Section 553.993(5) or (7), <i>Florida Statutes</i> , or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i) or an <i>approved</i> third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the <i>building thermal envelope</i> .			
Exception: Testing is not required for additions, alterations, renovations or repairs of the building thermal envelope of existing buildings in which new construction is less than 85 percent of the building thermal envelope.			
During testing:			
<ol style="list-style-type: none">1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.3. Interior doors, if installed at the time of the test, shall be open.4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.5. Heating and cooling systems, if installed at the time of the test, shall be turned off.6. Supply and return registers, if installed at the time of the test, shall be fully open.7. If an attic is both air sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting an infiltration volume and calculating the air leakage of the home.			
Testing Company			
Company Name: _____ Phone: _____			
I hereby verify that the above Air Leakage results are in accordance with the 2023 Florida Building Code Energy Conservation (8 th Edition) requirements according to the compliance method selected above.			
Signature of Tester: _____ Date of Test: _____			
Printed Name of Tester: _____			
License/Certification #: _____ Issuing Authority: _____			